

VISIT...

LANZAROTE
Caliente.COM

**INSTRUCTION MANUAL
FOR**



RUGER®

**Mark I Target Model and
Standard Model
Automatic Pistols**



FOR REFERENCE ONLY
These models are out of
production. They have been
superceded by the Ruger
Mark II Automatic Pistols.

**READ THE INSTRUCTIONS AND WARNINGS
IN THIS MANUAL CAREFULLY
BEFORE USING THIS FIREARM**

**THIS INSTRUCTION MANUAL SHOULD ALWAYS ACCOMPANY THIS FIREARM
AND BE TRANSFERRED WITH IT UPON CHANGE OF OWNERSHIP,
OR WHEN THE FIREARM IS LOANED OR PRESENTED TO ANOTHER PERSON.**

**A COPY OF THE INSTRUCTION MANUAL FOR EACH MODEL RUGER FIREARM
IS AVAILABLE FROM THE FACTORY ON REQUEST.
THESE INSTRUCTION MANUALS CONTAIN IMPORTANT WARNINGS
WHICH MUST BE UNDERSTOOD BEFORE USING THESE FIREARMS.**

**STURM, RUGER & Company, Inc.
Southport, Connecticut 06490 U.S.A.**

**ALL RUGER FIREARMS ARE DESIGNED AND MANUFACTURED
IN RUGER FACTORIES IN THE UNITED STATES OF AMERICA**

FIREARMS SAFETY — YOUR RESPONSIBILITY

SAFETY MUST BE THE FIRST AND CONSTANT CONSIDERATION OF EVERY PERSON WHO HANDLES FIREARMS AND AMMUNITION.

This Instruction Manual is designed to assist you in learning how to use and care for your RUGER® Automatic Pistol properly.

Only when you are certain you fully understand the Manual and can properly carry out its instructions should you practice loading, unloading, etc. with live ammunition.

If you have any doubts about your ability to handle or use a particular type of gun safely, then you should seek supervised instruction.

Such personalized instruction is often available from gun dealers, gun clubs or police departments. If none of these sources can help you, write to the National Rifle Association, Washington D.C. 20036. They will assist you.

The person with a gun in his possession has a full-time job. He cannot guess; he cannot forget. He must know how to use his firearm safely. *Do not use any firearm without having a complete understanding of its particular characteristics and safe use.* Remember: There is no such thing as a foolproof gun.

TABLE OF CONTENTS

	Page
General Information and Mechanical Characteristics	3
Ammunition	3
To Load and Fire	4
Positions of the Safety (Illustrations)	5
To Unload	6
To Extract and Eject a Chambered Cartridge	7
To Clear a Malfunction ("Jam")	7
To Disassemble for Cleaning	9
To Reassemble	9
Sight Adjustment	11
Care and Cleaning	11
Periodic Maintenance	12
Service and Parts Policy	12
Parts Drawing	14
The Basic Rules of Safe Firearms Handling	16

WARNINGS OF GREAT IMPORTANCE ARE FOUND ON THE FOLLOWING PAGES:

Alteration	2	Handling	8
Ammunition	3	Firing	9
Bore Obstructions	3	Lubrication	12
Unloading	6	Parts Purchasers	14
Malfunction	8		

Other Cautions and Warnings appear on Pages 3,4,5,6,13,16 and 17

ALTERATION WARNING

Sturm, Ruger & Company, Inc. will not be responsible for *any* alteration of *any* part of this firearm after it leaves our control, or for the addition or substitution of parts or accessories not manufactured by Sturm, Ruger & Company, Inc. This product was designed to function properly *in its original condition*. Any changes made in this product are specifically contrary to our instructions and we expressly do *not* authorize any changes to be made after manufacture. *Do not jeopardize your safety or the safety of others by making modifications to your firearm.*

FIREARMS ARE DANGEROUS WEAPONS—READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL THOROUGHLY AND CAREFULLY BEFORE USING THE RUGER AUTOMATIC PISTOL.

GENERAL INFORMATION AND MECHANICAL CHARACTERISTICS

The Ruger Standard Automatic and Mark I Automatic are .22 caliber rimfire, 9-shot, magazine fed, semi-automatic recoil ("blowback") operated pistols. Both models have the same basic operating mechanism. **WARNING:** These pistols will *fire* whether or not there is a magazine in the gun if there is a cartridge in the chamber. Removing the magazine does not unload the pistol. To unload the pistol, **FIRST REMOVE THE MAGAZINE, THEN PULL BOLT FULLY TO THE REAR AND EJECT THE CARTRIDGE. DON'T ASSUME THAT THE CHAMBER IS EMPTY, VISUALLY INSPECT IT EVERY TIME YOU HANDLE THE PISTOL.**

AMMUNITION

The Ruger Automatic pistol is chambered only for the .22 caliber Long Rifle cartridge, standard velocity or high velocity, manufactured to Industry Standards. Do not attempt to load .22 Long, .22 Short, or any other type .22 caliber cartridge into the magazine or in the chamber of the pistol.

AMMUNITION WARNING

Firearms may be damaged, and death or serious injury to the shooter or other persons may result, from any condition which contributes to the generation of excessive pressure, or the uncontrolled release of gas, within a firearm. The foregoing adverse conditions can be caused by *bore or chamber obstructions, propellant powder overloads, or by defective, incorrect, or improperly loaded and assembled cartridge components*. The relatively soft and thin metal used in .22 caliber rimfire cartridges makes burst caseheads a not uncommon occurrence in firearms of this caliber, therefore, *always* wear shooting glasses.

It is extremely dangerous to use a cartridge whose pressure is greater than that developed by cartridges loaded to Industry Standards. Even the strongest firearm can be blown up as a result of excessive pressure.

NOTICE

WE SPECIFICALLY DISCLAIM RESPONSIBILITY FOR ANY DAMAGE OR INJURY WHATSOEVER OCCURRING IN CONNECTION WITH, OR AS THE RESULT OF, THE USE IN THE RUGER PISTOL OF FAULTY, OR NON-STANDARD, OR "RE-MANUFACTURED", OR HAND LOADED (RELOADED) AMMUNITION, OR OF CARTRIDGES OTHER THAN THOSE FOR WHICH THE FIREARM WAS ORIGINALLY CHAMBERED.

BORE OBSTRUCTIONS WARNING

Before loading or firing the pistol, examine the bore to be certain it is clear and unobstructed. *Firing the pistol with any obstruction in the bore — even a heavy coating of oil, or drops of water — may result in damage to the gun and injury to the shooter and other persons nearby.*

A misfire or unusual report (sound) upon firing is always a signal to cease firing and immediately examine the chamber and bore. If there is any obstruction — full or partial — clear the obstruction with a cleaning rod and bore brush before firing the gun.



PARTS FREQUENTLY REFERRED TO ARE DENOTED BY ARROWS

TO LOAD AND FIRE

Practice this important aspect of gun handling (with an unloaded pistol) until you can perform each of the steps—described below—with skill and confidence. But *before* you do anything with the pistol, first read *completely thru* this Manual.

1. Using your thumb, push the knurled magazine catch at the bottom of the grip frame to the rear and pull the magazine down out of the grip frame by its grooved foot. (See Figure 1 and Figure 2.)

2. Put nine (9) or fewer .22 caliber Long Rifle cartridges into the magazine. (See Figure 3.) In loading the magazine, make sure that all of the cartridges lie parallel and evenly in the magazine. The button on the side of the magazine is used to lower the follower so the cartridges can be readily inserted. CAUTION: When using the button, have it under control. When loading or handling the magazine, do not pull the button down and then release it suddenly. The rim of the cartridge hitting the magazine lips can set off a sensitive primer and cause the cartridge case to discharge, burst violently, and cause injury.

Figure 1

Figure 2

Figure 3



3. Insert magazine into pistol, taking care that the magazine catch closes fully and thus has the magazine locked in place. Slamming the magazine into the grip frame is not necessary and should not be done.



Figure 4

4. With a loaded magazine in place, hold the pistol firmly in the shooting hand *but don't touch the trigger*. With the thumb and forefinger of the other hand, grasp the grooved ears of the bolt and pull the bolt to the rear as far as it will go. (See Figure 4.) Release the bolt so that it will fly forward, chambering the first cartridge. The safety button is now in the down position with the "F" (fire) fully showing. (See Figure 5.) The pistol is now ready to fire each time the trigger is pulled, until all of the cartridges in the magazine, *and the one in the chamber*, have been fired. If the pistol is not to be fired immediately or consecutively, the safety button on the left side of the grip frame should be pushed fully upward so that a click is heard and the letter "S" is fully showing. (See Figure 6.) The safety will engage (move fully upward) only when the pistol is cocked. CAUTION: Placing the safety in an 'intermediate' position between 'safe' (S) and 'fire' (F) can result in the gun user thinking the safety is in a safe position when it is not. Therefore always move the safety *fully* to its intended position and then check to be sure it is where you want it to be.



Figure 5. Safety shown in "fire" (F) position. Safety is all the way down.



Figure 6. Safety shown in "safe" (S) position. Safety is all the way up.

5. The safety also serves to hold the bolt open. The safety should be used to hold the bolt open when checking the pistol visually to see if the chamber is loaded, to have the pistol in its safest mode (bolt locked open—chamber empty), and when inspecting or cleaning the pistol.

NOTE: The bolt is not in its rearmost position when being held open by the safety. When the bolt is not in its rearmost position, it does not develop 'full speed' in moving forward. Therefore **DO NOT ATTEMPT TO CHAMBER A CARTRIDGE FROM THE MAGAZINE BY ONLY RELEASING THE SAFETY.**

The correct way to chamber a cartridge from the magazine is to:

- a) Pull the bolt back to its maximum rearward position, and then . . .
- b) With a finger of the other hand, push the safety fully down, and then . . .
- c) Allow the bolt to fly forward with full energy to strip a cartridge from the magazine and chamber it.

When the safety is ON (the "S" fully showing), the bolt cannot be opened. When the safety is "ON" check to be sure that the bolt *cannot* be drawn back.

CAUTION: The bolt of the Ruger pistol does NOT automatically 'hold open' when the last cartridge from the magazine has been fired. Therefore there can be a cartridge in the chamber any time the bolt is closed. The only way to be certain the pistol is completely unloaded ('empty') is to remove the magazine and lock the bolt open with the safety. See the instructions in the section headed, "To Unload".

UNLOADING WARNING

Removing the magazine from the pistol does *not* prevent the pistol from being fired! When there is a cartridge in the chamber, and the safety is off ("F" position), then the cartridge will discharge if the trigger is pulled. Therefore, it is absolutely essential for the user of an automatic pistol to know how to *completely* unload it. "Completely" means *first* removing the magazine and *then* removing a chambered cartridge.

TO UNLOAD

NOTE: This sequence must be followed exactly as spelled out. Failure to do so can result in the pistol's chamber becoming unintentionally loaded with a cartridge!

1. The muzzle of the pistol must be pointing in a safe direction at all times, and your fingers must be outside the trigger guard. If the pistol is cocked, put the safety on by pushing safety button *fully* upward. If the pistol is not cocked the safety cannot be engaged.

2. Remove the magazine from the pistol and place it where it will not get damaged or collect dirt. (*REMEMBER that even though the magazine has been removed, a cartridge remaining in the chamber can still be fired.*)

3. If the safety was on, disengage it (the letter "F" will show). While firmly holding the pistol in your left hand, grasp the bolt ears *firmly* between the thumb and forefinger of your right hand and pull the bolt fully to its rearward position. Lock the bolt open by pushing the safety upward until the "S" shows. (See Figure 7.) Pulling back on the bolt should eject any cartridge that may have been in the chamber. But *always visually double check* the chamber and the interior area of the receiver and the magazine-well to be certain there are no cartridges present. Gently shake the pistol to dislodge any cartridge which may have been ejected into the magazine-well when the bolt was retracted.



Figure 7. Pull Bolt to the rear, push Safety all the way up.

4. If desired or if circumstances require it, the bolt can be left in the open position, being held there by the safety. If it is desired to close the bolt, again look to be certain the chamber is empty. Then, push the safety down (the letter "F" will show) and the bolt will snap forward. Keep your fingers out of the receiver!

5. Make certain the muzzle is pointed in a safe direction, then pull the trigger to decock the pistol.

6. If the magazine contains cartridges, they can be removed by pressing down slightly on the magazine button (to ease the spring tension) with the thumb, and then sliding the cartridges forward and out of the magazine, one at a time, until emptied.

7. Push empty (unloaded) magazine into grip frame until the catch locks it in place.

TO EXTRACT AND EJECT A CHAMBERED CARTRIDGE

When the automatic pistol is fired, the same gas pressure which drives the bullet forward also acts thru the cartridge case to push the bolt to the rear. That action causes extraction and ejection of the fired cartridge case. But, when the bolt is operated by hand, there can be a failure to extract the cartridge from the chamber, or a failure to eject the cartridge clear of the pistol. These failures usually are the result of the bolt not being pulled rearward vigorously, coupled with an accumulation of bullet lubricant in the chamber. From the foregoing it is clear that the gun user must:

1. Always visually check the chamber after opening the bolt to eject a chambered cartridge. If the bolt is not vigorously retracted when being operated by hand, the extracted cartridge can be 'ejected' into the grip frame of the magazine-well.

2. Thoroughly clean the chamber and the extractor as often as necessary to prevent the accumulation of grease and dirt.

If an empty magazine is in the pistol when the bolt is being hand retracted to extract a cartridge, the cartridge may drop on top of the magazine. Then when the bolt goes forward, the cartridge will be chambered again! This can be avoided by always removing the magazine *before* clearing the chamber, and visually ensuring that no cartridges remain in the gun.

TO CLEAR A MALFUNCTION ("JAM")

1. Always keep the muzzle pointed in a safe direction.

2. If possible, first remove the magazine. It may be necessary to manually remove a jammed cartridge which has only partially been stripped from the magazine from the gun. If so, use extreme care. Lock the bolt open with the safety before attempting to clear the jam. Drawing the bolt fully to the rear may bring the jammed cartridge along. *Keep your face away from the ejection port during this operation.* When attempting to clear a jam, use only wood 'tools' so that a cartridge will not be ignited and so that the chamber and magazine will not be damaged. A 3/16" wood dowel rod with a point on one end is useful for clearing jams.

3. Visually check to make sure all cartridges have been removed from the pistol. Safely dispose of any cartridges involved in a malfunction incident. Do not use damaged ammunition in any firearm.

4. If it appears that the gun and magazine are not at fault and that the jam was caused by the type of cartridge being used, then try another type.

5. If changing to another type or brand of cartridges does not at once result in smooth feeding of cartridges from magazine to chamber, then the following steps should be taken:

a. Make certain the gun and the magazine are unloaded. Remember, the magazine should be removed first, then check the chamber and be certain it and the magazine-well are clear of cartridges.

b. Thoroughly clean the magazine, paying particular attention to removing accumulated grease. Thoroughly clean the breech mechanism of the firearm. Use a bristle brush and solvent to remove grease and fouling from the breech face, the extractor, the chamber, and the feed ramp. (See the Care and Cleaning section of this manual for detailed cleaning instructions.)

c. Check to see that the magazine spring tension is adequate.

d. Check the magazine lips to be certain they are free of nicks and burrs and are not deformed.

e. Remove excess oil and solvent from all cleaned components, load the magazine, and try the firearm again. As always, proceed slowly. Be certain bystanders are not close and that you are wearing eye protection and that your face is a safe distance from the pistol so that any discharge incident resulting from a jammed cartridge will not injure anyone.

If the above procedures do not result in a smooth and reliable feeding firearm, don't use the gun until it feeds cartridges smoothly and reliably. The pistol can be returned directly to our Southport Service Department for repair. See the Service and Parts Policy section of this manual for packing and shipping information.

Another precaution: When using any firearm chambered for rimfire cartridges, form the habit of examining fired cartridge cases from time to time. If fired cases have bulged heads or frequently show splits on any part of the case, the rifle or pistol should be returned to the factory for inspection.

MALFUNCTION WARNING

The .22 Long Rifle rimfire cartridge has its sensitive priming compound distributed around the inside of its rim. It is fired by the impacting of the firing pin against the relatively soft cartridge case, which detonates the priming compound. *Any* crushing of the rim can cause a rimfire cartridge to be 'discharged' before it is chambered if the rim of the cartridge receives a sharp blow from *any* source. For that reason the user of a firearm chambered for a rimfire cartridge must regard any jam or feeding problem as a signal to immediately stop using the gun until it can be determined what is wrong.

If a cartridge hangs up, jams, or binds when being hand chambered or when being fed from the magazine into the chamber, *do not attempt to force it into the chamber by pushing or striking the bolt.*

Most failures of a cartridge to feed or to chamber are caused by a damaged magazine, improper gun handling, or defective ammunition.

Whatever the cause, the gun user must, above all, recognize that rimfire cartridge jams can result in the very potentially dangerous situation of a cartridge discharging before it is chambered. If this occurs, the cartridge case will rupture and its fragments will fly out of the gun with sufficient force to cause injury. *Always wear shooting glasses!*

HANDLING WARNING

Do not load the pistol until you are ready to use it, and unload it *immediately* when you have completed shooting. (See also UNLOADING WARNING in this Manual.)

Exercise utmost care and caution at all times when handling any firearm. The firearm should be carried and handled so it will not be dropped or struck. With the safety off (in the "F" position) the pistol is in the ready-to-fire mode. Therefore, as in any firearm, any blow or jar which is of sufficient force to actuate components of the firing mechanism (trigger or hammer or sear or firing pin) may cause a chambered cartridge to discharge. Such a discharge can occur with or without the trigger being directly struck or touched.

When carrying the pistol with a loaded magazine in place, the chamber should be empty and the bolt should be closed.

Do not carry the pistol with a cartridge in the chamber!

Do not carry a loaded pistol with the safety in the "F" position! The user should never depend on a safety mechanism or any other mechanical device to justify careless handling or permitting the pistol to point in an unsafe direction. The shooter should always be alert to the possibility of accidental discharge regardless of the position of the safety. The only safe pistol is one in which the bolt is open, the chamber is empty and there is no magazine in the gun.

FIRING WARNING

When firing the pistol, be sure that other shooters and bystanders are well clear of the shooter and a safe distance to the rear. Empty cartridge cases are ejected from the pistol with some velocity and could cause injury to any person who is standing in their path. Left-handed shooters should be particularly cautious concerning ejected cartridge cases and powder. *All shooters should wear shooting glasses when firing the Ruger Automatic Pistol.*

The bolt of the Automatic Pistol moves rearward forcefully and at high speed when the gun is fired. Do not position your face, hands, or any part of your body so the bolt can strike you when the gun is fired.

TO DISASSEMBLE FOR CLEANING

WARNING: Never clean, lubricate, disassemble, assemble, or work on a firearm while it is loaded.

1. Remove the magazine. Draw the bolt fully rearward and visually inspect the chamber to be certain there is no cartridge in it and then release the bolt. Pull the trigger, *to be sure hammer has fallen.* Hammer must be uncocked before pistol can be disassembled.

2. Insert a blunt, 'pointed' instrument in the oval recess of the mainspring housing (at the back of the grip) and swing the housing latch open like the blade of a pocket knife. (Some users find that a paper clip, looped over the latch, is an ideal 'instrument' for this phase of disassembly.)

3. Swing the entire housing outward on its pivot and pull downward, removing mainspring housing and bolt stop pin, as shown in Figure 8. With new pistols it may be necessary to lightly tap (with a plastic hammer) on the top portion of the bolt stop pin — which protrudes above the receiver — while pulling downward on the mainspring housing.

4. With the mainspring housing and bolt stop pin (as an assembly) removed, a blow (with a plastic hammer) on the rear of the bolt will disengage the barrel-receiver assembly from the grip frame. The bolt can then be removed from the receiver. *No attempt should be made to remove rivets or staked pins. Further disassembly should be undertaken only by the factory.*

TO REASSEMBLE

1. Slide bolt into receiver, spring upward. **CAUTION:** When sliding the bolt into the receiver, **BE CERTAIN** that the Firing Pin Stop (Part #A35B, a small pin) is in the bolt. If the bolt is assembled without the Firing Pin Stop in place, the first time the pistol is dry fired (no cartridge in the chamber), the firing pin will be free to move forward to the extent that it will dent the rear face of the chamber, thus rendering the Barrel-Receiver Assembly useless and beyond repair.

2. Place hammer in horizontal position. Push safety upward, to ON ("S" showing).

3. Place barrel-receiver on top of frame about one quarter of an inch ahead of its final position and press it backward and downward so that the lug (formed by the top end of the trigger guard) engages the front recess on the underside of the receiver (see Figure 8). When the rear end of the receiver is just about even with the

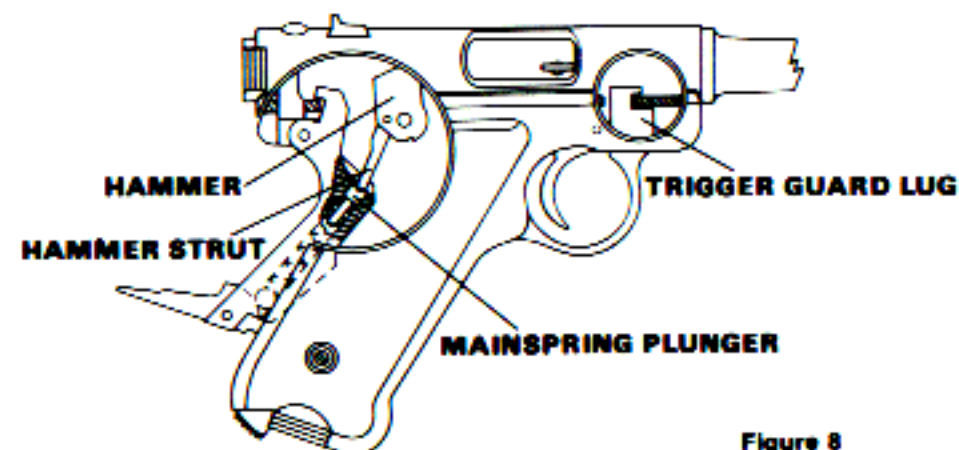


Figure 8

rear end of the grip frame, the barrel-receiver is properly aligned. If alignment is not achieved by hand pressure, then it is necessary to strike the muzzle of the barrel with a plastic hammer or wood mallet. Maintain pressure in a downward direction on the receiver when striking on the barrel muzzle. **CAUTION:** Because the barrel muzzle must not be damaged in any way, it is essential that any hammer applied to the muzzle be plastic or wood.

4. Grasp the mainspring housing assembly and press the bolt stop pin (which is a part of it — see Figure 9) upward through the holes in the receiver. As this pin is pushed upward through the grip frame and receiver it also passes through the slot in the bolt and must also pass by the rear end of the recoil spring guide, camming the guide forward to put initial tension into the recoil spring. The best way to accomplish this is to hold the mainspring housing as a handle in one hand and holding the gun in the other, press the pin upward until the tip of the pin protrudes beyond the top of the receiver. At this point move the safety to the fire (F) position and then pull the trigger. Be certain the hammer is released to its fired position. When the hammer is in the fired position it is then possible to observe the hammer strut. That is essential to carrying out the next step.

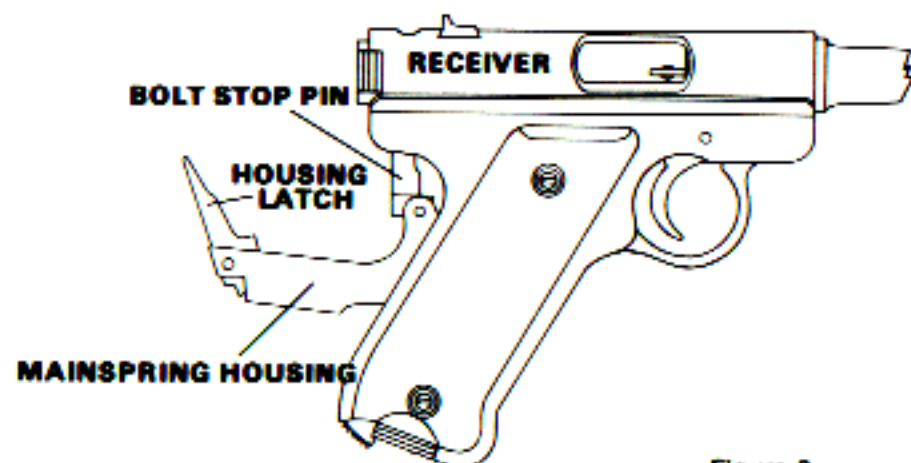


Figure 9

5. Getting the mainspring housing in place correctly is best achieved in two stages: First, be certain the bolt stop pin is fully inserted, then Second, swing the housing into place and lock as described below. Remember, when the pin is protruding thru the receiver, be certain the upper end of the housing has engaged the ledge inside the lower portion of the receiver. If this engagement is not secure, the housing will pull out when it is swung closed.

6. The mainspring housing is now ready to be swung shut, but it is **essential that the hammer strut comes to rest on the mainspring plunger as the housing is closed.**

The mainspring plunger lies inside the mainspring housing and may be seen through the slot in the upper end of the housing. If the hammer strut does not contact the mainspring plunger as the housing is swung shut, it will either be impossible to complete the closure of the housing or the housing may be closed but it will be impossible to draw the bolt all the way back. **Note: It is also essential that the hammer itself be in its uncocked, upward position (resting on the firing pin) as the mainspring housing is swung shut.** Some users find this phase of reassembly is best accomplished by holding the pistol with the barrel generally in a vertical position, but tilted at an angle that causes the hammer strut to drop into the correct position to 'meet' the mainspring plunger in the housing.

7. When proper engagement is achieved, closure is completed against tension of the mainspring, which can be felt as the housing is pressed home into the frame.

8. The housing latch may now be snapped shut, completing reassembly. To determine if the assembly has been correctly performed, pull bolt to its rearward position. The bolt should open fully. If it does not, disassemble and repeat step 5. above.

Note: The foregoing description of the reassembly procedure may give the impression that reassembly is difficult; but in reality it is a straightforward operation, once properly learned.

SIGHT ADJUSTMENT

MARK I MODEL: The Target models are equipped with a rear sight that is adjustable for elevation and windage. Each click of the sight adjustment screws (either windage or elevation) will move the point of impact of the bullet approximately $\frac{1}{4}$ " at a range of 25 yards. The height of the front sight has been set to take best advantage of the elevation adjustment in the rear sight.

The Elevation and Windage screws on the adjustable rear sight should be turned only with screwdrivers that exactly fit the screw heads. **ELEVATION CHANGE:** To raise point of impact: turn screw *counterclockwise*. To lower point of impact: turn screw *clockwise*. **WINDAGE CHANGE:** To move the point of impact to the *right*: turn screw *counterclockwise*. To move the point of impact to the *left*: turn screw *clockwise*.

STANDARD MODEL: In the Standard Model pistol (fixed rear sight), if the gun shoots low, the front sight blade can be reduced in height by careful filing. File off only a small amount and then target the gun. Repeat the filing process until the desired point of bullet-impact is achieved. The rear sight on the Standard Model does not have a screw adjustment arrangement, however, some lateral (windage) adjustment is possible by moving the rear sight in its dovetail slot. To move the rear sight, place a brass punch against the base of the sight and tap the sight in the direction you wish to move the bullet on the target. Use a small hammer to tap the rod. Before attempting to move the sight, make a pencil mark on both the sight and the receiver. Such an index mark will enable you to see how much the sight is moved.

(See Figure 10 on page 17 for Sight Picture information.)

CARE AND CLEANING

Before cleaning, be certain the pistol and its magazine contain no cartridges.

The popular .22 Long Rifle cartridge deposits particles of bullet lubricant and powder on the bore, chamber, bolt, receiver, magazine, and other parts of the pistol. Therefore, the frequency and extent of required cleaning is directly related to how much the pistol is fired. There is no fixed rule as to how frequently the pistol should be cleaned. But the alert gun owner soon learns that any semi-automatic firearm functions most reliably when it is free of accumulations of grease and other firing residues.

Basic materials for cleaning are: A cleaning rod of proper size equipped with bristle bore brushes (fiber and brass) and a tip in which a cleaning patch is inserted — Cloth patches — Powder Solvent — Lubricating Oil — Small, lint-free cloths for wiping and oiling — A Toothbrush for scrubbing dirt off the bolt face, extractor, magazine lips, follower, etc.

Some basic hints when using cleaning equipment are: Use the proper size bore brushes and patches — if they are too small they don't do the job; if they are too big they can bind in the bore. When possible, insert cleaning rod from the chamber end of the bore and push the rod all the way thru so that it emerges from the other end of the bore. Don't 'reverse' the rod when a brush or patch is in the barrel — it may bind. Do not use patches that are dripping with solvent or oil. Wet the patches — or bore brushes or toothbrush — then squeeze out excess before using. When using the bore brushes or toothbrush on the bolt face, breech areas, magazine, etc., work carefully so as not to damage components.

To clean the pistol proceed as follows:

1. Remove the magazine and empty it of all cartridges. Separate the cartridges from the pistol before beginning the cleaning operation. Open the bolt and visually check to be certain the chamber and magazine-well (the 'tunnel' in the grip frame where the magazine fits) are free of cartridges.

2. Disassemble the pistol to the extent described in the section of this manual headed, To Disassemble For Cleaning.

3. Using the cleaning rod, run a solvent-wetted patch thru the bore several times. Then attach a solvent-wetted bristle brush to the rod and run it back and forth, the full length of the bore, as many times as is necessary to remove grease and dirt from the bore and chamber. Clean bore with dry patches and examine it. If necessary repeat bore scrubbing. Bore fouling can contribute to reduced accuracy, and grease accumulation in the chamber can interfere with proper feeding of cartridges from the magazine.

4. Using powder solvent on a clean patch, remove powder residue from all components of the mechanism. If grease or dirt cannot be removed by wiping with the patch, then use a solvent-wetted toothbrush. After using the toothbrush, wipe scrubbed areas with a solvent-wetted patch. After cleaning, run a dry patch through the bore, then follow with a patch that is very lightly oiled. Wipe all surfaces clean with cloth, then wipe all surfaces with a patch (or cloth) that has been lightly oiled. Lightly oil all the parts noted above.

5. Reassemble the pistol. If the pistol is to be stored for an extended period, then the final oil-wiping can be a bit heavier so that there will be less tendency for it to evaporate.

6. Clean the magazine by holding the follower down as far as possible. Carefully scrub accumulated grease from the interior front section of the magazine body with a solvent-wetted bristle bore brush. After scrubbing, use a dry patch to clean away the loosened grease and dirt. Finally, very lightly oil the interior and exterior of the magazine. Caution: Be careful and do not scratch the interior of the magazine, particularly along the front section where the bullet tip rides. Also, be particularly careful not to bend the 'prongs' on each side of the magazine lips. If you find it too difficult to hold down and *control* the follower button directly with your thumb, then position a small piece of wood — a flat-sided pencil will serve — against the side of the magazine and on top of the button and apply thumb pressure to it.

NOTE: Only a very small amount of oil is needed to provide adequate lubrication of moving parts and to prevent rust. Accumulations of oil tends to attract particles of dust and dirt which can interfere with the safe and reliable function of the mechanism of the firearm. *Do not apply excess lubricating oil.*

PERIODIC MAINTENANCE:

At regular intervals, or whenever your automatic pistol has been exposed to sand, dust, extreme humidity, condensation, immersion in water, or other adverse conditions, disassemble it and clean and oil as outlined above. Proper periodic maintenance is essential to the reliable functioning of any firearm.

WARNING: If the pistol has been stored, *before firing* remove all oil and grease from the bore with bristle brush followed by dry patches, on the cleaning rod.

Do not keep your pistol in a leather holster or case when it is stored. Leather attracts moisture, even though the holster or case may appear to be dry.

WARNING: Never place or store a firearm in such a manner that it may unintentionally be dislodged. *A firearm should be stored securely and unloaded.*

LUBRICATION WARNING

Firing a pistol with oil, grease, or any other material even partially obstructing the bore may result in damage to the pistol and injury to the shooter and those nearby.

Do not spray or apply lubricants directly on ammunition. If the powder charge of a cartridge is affected by the lubricant, it may not be ignited, but the energy from the primer may be sufficient to push the bullet into the bore where it may become lodged. Firing a subsequent bullet into the obstructed bore may damage the pistol and cause injury to the shooter and those nearby. *Use lubricants properly.* You are responsible for the proper care and maintenance of your firearms.

SERVICE AND PARTS POLICY

Before shipment, every Ruger firearm is inspected and test-fired to ensure that it conforms fully to our specifications and standards. If you have any question with regard to the performance of your pistol, please write to our Southport, Connecticut Service Department, fully describing all circumstances and conditions involved.

If you should return your pistol to the factory for repair, or order parts for it, please comply with the following suggestions for prompt service:

SHIPPING FIREARMS FOR REPAIR:

Ruger Automatic Pistols returned to the factory for services or repair should be sent to:

Sturm, Ruger & Co., Inc., Service Department, Southport, CT 06490

Guns shipped to the factory should be sent prepaid. *We will not accept collect shipments.*

The Federal Gun Control Act, as well as the laws of most States and localities, does not prohibit an individual (who is not otherwise barred from purchasing or possessing a firearm) from shipping a firearm directly to the manufacturer for repair. However, before you ship your pistol to us, be certain that your State or locality does not have a law or regulation which will prohibit you from receiving the pistol from us after it has been repaired. If such receiving is prohibited, then please have a Federally Licensed firearms dealer ship the gun to us. If your pistol is sent to us by a dealer, it will be returned to him after being repaired. If a handgun (pistol or revolver) is shipped by an individual who does not hold a Federal Firearms License, it must be shipped via UPS. Persons who do not hold a Federal Firearms License are prohibited by Federal law from shipping a handgun by Mail. Handguns mailed in violation of the law are impounded by the Post Office.

Please do *not* include holster, custom grip panels, telescopic sights, or custom accessories with a firearm being shipped to the factory for service.

Enclose a letter which includes your name, address, telephone number, and serial number and model of the firearm. Describe in detail the trouble you have experienced with your firearm, or the work you wish to have done. Merely stating that the firearm 'needs repair' is inadequate information. Please enclose copies of any previous correspondence.

Work performed will bear a net minimum labor charge of \$5.00. The charge for rebluing the Ruger Automatic Pistol is \$15.00, which includes labor.

WARNING: Before shipping any firearm, be absolutely certain that it and its' magazine are unloaded. Do not ship cartridges with a firearm.

ORDERING PARTS:

All parts orders should be sent to:

Sturm, Ruger & Co., Inc., Service Department, Southport, CT 06490

Payment must accompany order. Minimum parts order is \$1.00.

Order parts by Part Number and Part Name and *include the entire serial number of the firearm* for which the parts are being ordered.

*Parts designated by an asterisk *must* be factory fitted. The price shown for these parts does not include the *minimum* net labor charge of \$5.00. All parts in the Parts List marked with an asterisk are factory replaced *on an exchange basis only*. We will not return the replaced parts. **Firearms users are cautioned that a gun containing modified, broken, malfunctioning, or badly worn parts should not be fired!**

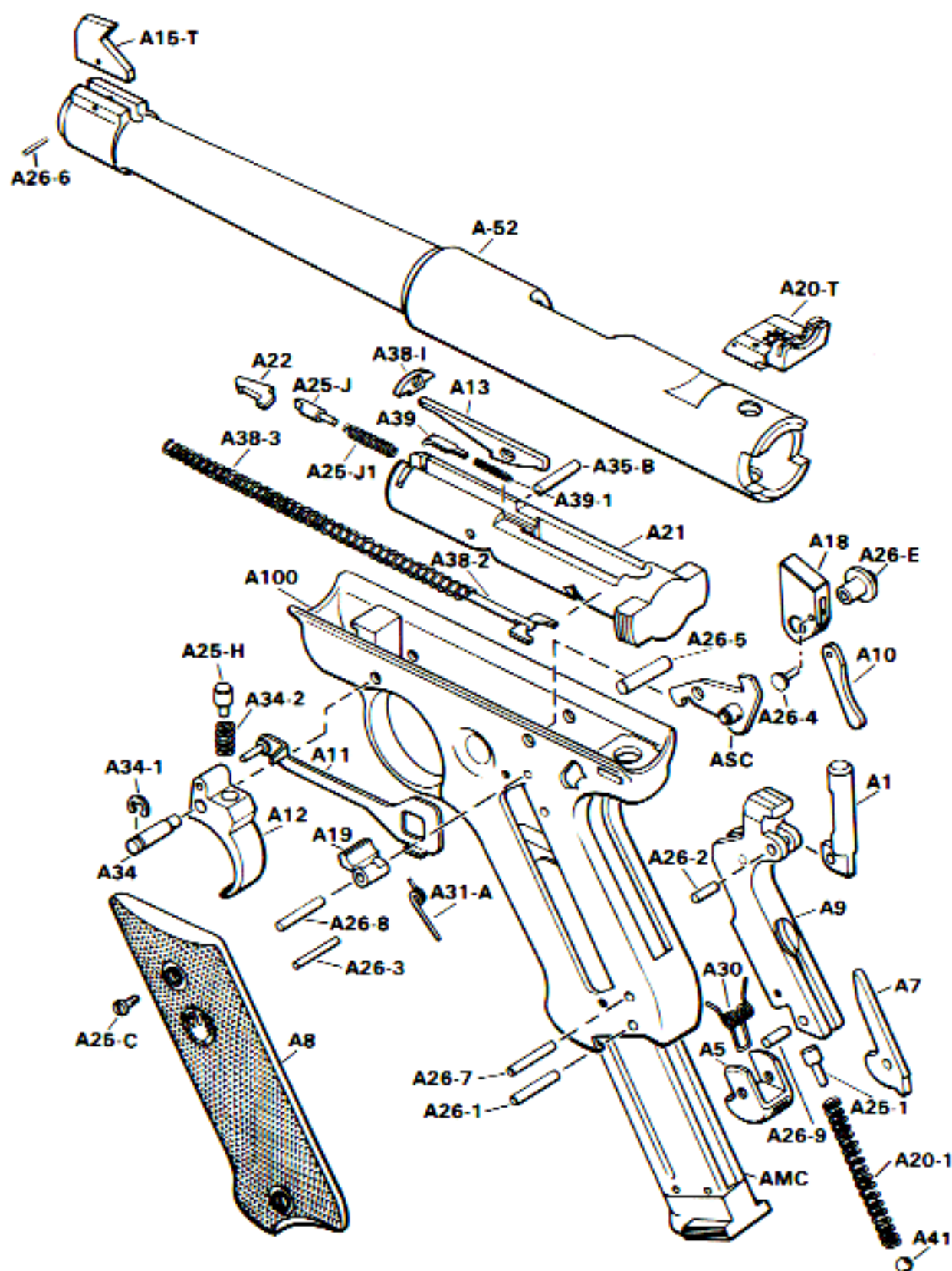
Because it is a serial numbered component, the Automatic Pistol Barrel-Receiver Assembly (A-52 in the parts drawing) is defined as a "firearm" by Federal law and is not sold as a separate component. The Barrel-Receiver of the Ruger Automatic Pistol is an integrated assembly, therefore, the barrel alone is not available as a separate component part.

Note on older model Grip Frame and Magazine: The grip frame on all models of Ruger .22 caliber Automatic Pistols was changed in 1971. New grip frames are marked "A-100" on the left side, underneath the grip panel. These new frames will accommodate *only* the new style magazine (AMC) and the new style grip panels (A108). Old style grip frames will accommodate *only* the old style grip panels (A-8) because the screw holes are positioned differently.

Old style magazines (with slot on *right* side only) will *not* fit pistols marked A-100. The new magazine has its follower button on the left side, but the button can readily be changed to the right side. With the button on the right side, the magazine will then fit the older style pistols manufactured before 1971. (To change the button, depress the follower carefully and slowly with a piece of wood to the position where the slot widens to a circular opening. The button can now be withdrawn with the fingers and installed on the opposite side of the follower.)

WARNING TO PARTS PURCHASERS

It is the purchaser's responsibility to be absolutely certain that any parts ordered from the factory are correctly fitted and installed. Firearms are complicated mechanisms and IMPROPER FITTING OF PARTS MAY RESULT IN A DANGEROUS MALFUNCTION, DAMAGE TO THE FIREARM, AND INJURY TO THE SHOOTER AND OTHER PERSONS. The purchaser and installer of parts must accept full responsibility for the correct adjustment and functioning of the pistol after such installation.



Design, specifications and prices subject to change without notice.

PARTS LIST AND SUGGESTED RETAIL PRICES

Part No.	Part Name	Price
AMC	Magazine complete	\$ 9.50
A29	Magazine follower (not illustrated)	.75
A25B	Magazine follower button (not illustrated)	.50
A33	Magazine spring (not illustrated)	.50
A9C	Mainspring Housing Assembly complete (not illustrated)	10.75
A9	Mainspring Housing only	6.25
A1	Bolt Stop Pin	2.75
A26-2	Bolt Stop Pin Pivot	.50
A20-1	Mainspring	.50
A25-1	Mainspring Plunger	.50
A41	Detent Ball	.50
A7	Housing Latch	.50
A26-9	Housing Latch Pivot	.50
A15	Front Sight Blade (not illustrated)(must be drilled for cross pin)	.50
A26-6	Front Sight Pin	.50
A20	Rear Sight for Standard Model (not illustrated)	1.25
A16	Ejector (not illustrated)	.50
A25-A	Ejector Rivet (not illustrated)	.50
ABC	Bolt Assembly Complete (not illustrated)	32.75
A21	Bolt only	27.25
A38(1-2&3)	Recoil Spring Assembly	1.75
A13	Firing Pin	.50
A35B	Firing Pin Stop	.50
A39-1	Rebound Spring	.50
A39	Rebound Spring Support	.50
A22	Extractor	.75
A25-J	Extractor Plunger	.50
A25-J1	Extractor Spring	.50
A100	Grip Frame, with Trigger Guard	50.50
A5	Magazine Latch	2.75
A30	Magazine Latch Spring	.50
A26-1	Magazine Latch Pin	.50
A26-7	Magazine Latch Stop Pin	.50
A12	Trigger	2.50
A34	Trigger Pivot	.50
A34-1	Trigger Pivot Lock Washer	.50
A34-2	Trigger Spring	.50
A25-H	Trigger Spring Plunger	.50
A11	Disconnecter Complete	.75
A18	Hammer	5.25
A26-5	Hammer Pivot	.50
A26-E	Hammer Bushing	.50
A10	Hammer Strut	.50
A26-4	Hammer Strut Pin	.50
ASC	Safety Complete	2.25
A19	Sear	3.50
A26-8	Sear Pivot	.50
A31-A	Sear Spring	.50
A26-3	Sear Spring Stop Pin	.50
A-108LR	Grip Panels, Plastic	3.00
A-8	Grip Panels, Plastic	3.00
A-108WRWL	Grip Panels, Walnut	14.50
A-108WLTR	Grip Panels, Walnut, Left with Thumbrest	18.50
A-8WRWL	Grip Panels, Walnut	14.50
A-8WLTR	Grip Panels, Walnut, Left with Thumbrest	18.50
A28	Medallion	.50
A25-C	Grip Panel Screw (Set of 4)	.50
*Mark I trigger pull for Standard Model (includes installation of Hammer, Sear and Trigger with backlash stop and labor).		23.00
SPECIAL COMPONENTS FOR MARK I (all other components same as Standard Model)		
A20-T	Adjustable rear sight, complete (will not 'work' on Standard Model)	11.00
A15T	Front sight blade (T678)(must be drilled for crosspin)	1.75
BB-36	Ramp Front Sight (T512)	5.00
SXR-76	Screw for Ramp Front Sight	.50
A12-T	Trigger with backlash stop	4.00

*PARTS MUST BE INSTALLED AT FACTORY.

**FOR USE ONLY WITH GRIP FRAME MARKED A-100 ON LEFT SIDE FLAT OF GRIP.

THE BASIC RULES OF SAFE FIREARMS HANDLING

We believe that Americans have a right to purchase and use firearms for lawful purposes. The private ownership of firearms in America is traditional, but that ownership imposes the responsibility on the gun owner to use his firearms in a way which will ensure his own safety and that of others. When firearms are used in a safe and responsible manner, they are a great source of pleasure and satisfaction, and represent a fundamental part of our personal liberty.

Firearms do not cause accidents! Firearms accidents are almost always found to have been the result of carelessness, or ignorance on the part of the shooter of the basic rules of safe gun handling.

The following rules must be observed by gun users at all times. Safe gun handling is not just desirable, it is absolutely essential to the continuation of gun ownership and sport shooting as we know it today.

1. LEARN THE MECHANICAL AND HANDLING CHARACTERISTICS OF THE FIREARM YOU ARE USING. Not all firearms are the same. The method of carrying and handling firearms varies in accordance with the mechanical provisions for avoiding accidental discharge and the various proper procedures for loading and unloading. No person should handle any firearm without first having thoroughly familiarized himself with the particular type of firearm he is using, and with safe gun handling in general.

2. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. Be sure of the bullet stop behind your target, even when dry-firing. Never let the muzzle of a firearm point at any part of your body or at another person. This is particularly important when loading or unloading a firearm. In the event of an accidental discharge, no injury can occur as long as the muzzle is pointing in a safe direction. A safe direction means a direction which will not permit a discharged bullet to strike a person, or to strike an object from which the bullet may ricochet. A safe direction must take into account the fact that a bullet may penetrate a wall, ceiling, floor, window, etc., and strike a person or damage property. Make it a habit to know exactly where the muzzle of your gun is pointing whenever you handle it, and be sure that you are always in control of the direction in which the muzzle is pointing, even if you fall or stumble.

3. FIREARMS SHOULD BE UNLOADED WHEN NOT IN USE. Firearms should be loaded only when you are in the field or on the target range or shooting area, ready to shoot. Firearms and ammunition should be securely locked in racks or cabinets when not in use. Ammunition should be safely stored *separate* from firearms. Store your firearms out of sight of visitors and children. It is the gun owner's responsibility to be certain that children and persons unfamiliar with firearms cannot gain access to firearms or ammunition.

4. BE SURE THE BARREL IS CLEAR OF OBSTRUCTIONS BEFORE SHOOTING. Even a bit of mud, snow or excess lubricating oil or grease in the bore may cause the barrel to bulge, or even burst on firing, and can cause injury to the shooter and bystanders. Be sure that you are using ammunition of the proper caliber and loading for the gun you are using. If the report or recoil on firing seems weak, or doesn't seem quite right, CEASE FIRING IMMEDIATELY and check to be sure that no obstruction has become lodged in the barrel.

5. BE SURE OF YOUR TARGET BEFORE YOU SHOOT. Don't shoot unless you know exactly where your bullet is going to strike. Be sure of the bullet stop behind your target, even when dry-firing with an unloaded gun. If you are in the field hunting, do not fire at a movement or noise. Take the time to be absolutely certain of your target before you pull the trigger.

6. WEAR SHOOTING GLASSES AND HEARING PROTECTORS WHEN YOU SHOOT. All shooters should wear protective shooting glasses and some form of hearing protectors when shooting. Exposure to shooting noise can damage hearing, and adequate vision protection when shooting is essential.

7. NEVER CLIMB A TREE OR FENCE WITH A LOADED FIREARM. Put the firearm down carefully before climbing a fence, and unload it before climbing or descending a tree or jumping over a ditch or other obstruction. Never pull or push a loaded firearm toward yourself or another person. When in doubt, unload your gun!

8. DON'T SHOOT AT A HARD SURFACE, OR AT WATER. Bullets can glance off many surfaces like rocks or the surface of water and travel in unpredictable directions with considerable velocity.

9. NEVER TRANSPORT A LOADED FIREARM. Firearms should always be unloaded before being placed in a vehicle. A suitable carrying case or scabbard should be used to carry a firearm to and from the shooting area.

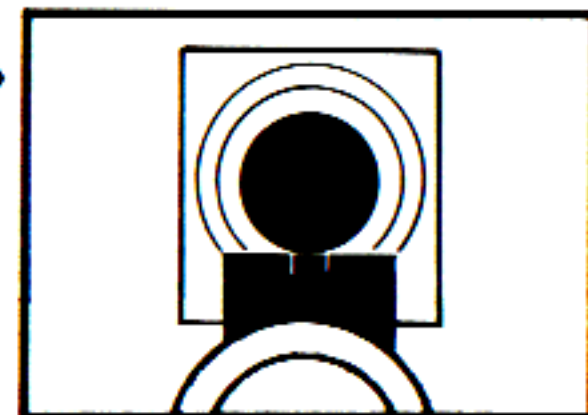
10. AVOID ALCOHOLIC BEVERAGES WHEN SHOOTING. Don't drink until the day's shooting is over. Handling firearms while under the influence of alcohol in any form constitutes a criminal disregard for the safety of others.

Figure 10

SUGGESTED SIGHT PICTURE

Top of front sight even with top of rear sight blade. Front sight centered in notch of rear sight blade. Target bullseye centered on top of front sight.

(For information on adjusting the pistol sights, see page 11.)



WHY NO WARRANTY CARD HAS BEEN PACKED WITH THIS NEW RUGER FIREARM

The Magnuson-Moss Act (Public Law 93-637) does not require any seller or manufacturer of a consumer product to give a written warranty. It does provide that if a written warranty is given, it must be designated as "limited" or as "full" and sets minimum standards for a "full" warranty.

Sturm, Ruger & Company, Inc. has elected not to provide any written warranty either "limited" or "full", rather than to attempt to comply with the provisions of the Magnuson-Moss Act and the regulations issued thereunder.

There are certain implied warranties under state law with respect to sales of consumer goods. As the extent and interpretation of these implied warranties varies from state to state, you should refer to your state statutes.

Sturm, Ruger & Company wishes to assure its customers of its continued interest in providing service to owners of Ruger firearms.

A BRIEF ACCOUNT OF AN EXTRAORDINARY ACHIEVEMENT: RUGER FIREARMS

One of the few American firearms manufacturers whose management has remained unchanged since starting in business, Sturm, Ruger & Company, Inc., had its beginnings in a small machine shop occupying a rented frame building in Southport, Connecticut. In January, 1949, with an initial investment of only \$50,000 and an idea, William B. Ruger and Alexander M. Sturm started production of a .22 caliber automatic pistol — a design which was so successful that it became the cornerstone upon which one of the most comprehensive lines of sporting firearms ever made in America was established. After Alex Sturm's death in 1951, William B. Ruger continued to direct the company alone and today, as President and Chairman of the Board, he is actively involved in the creative engineering of new products and continues to provide the leadership which has made this 32 year old company a sound and successful enterprise.

Sturm, Ruger & Company, in this relatively short time, has established itself as a leading small arms design organization, developing a unique and broad line of fine quality sporting, military and police firearms to become one of the world's most famous producers of revolvers, pistols, rifles and shotguns.

The Southport factory and the Newport factory and foundry complex together now comprise over 300,000 square feet of space. From a work force composed of a handful of individuals in 1949, both Southport and Newport facilities together now employ more than 1,300 people. From 1949 thru 1980, Ruger craftsmen have built more than 7 million firearms.

During its three decades of growth and progress under the leadership of William B. Ruger, the company has developed a business philosophy and implemented policies which represent a constructive influence in the life of modern America. From the beginning, Sturm, Ruger & Company played a positive role in conservation efforts and has supported the interests of its customers through its membership and participation in the programs of the National Rifle Association, National Shooting Sports Foundation, and many regional sportsmen's organizations. The company has always endeavored to market its firearms for constructive or recreational purposes, to emphasize the traditional aspects of shooting, to render meaningful public services and to encourage shooters in constructive and responsible participation in the shooting sports.

Today, Sturm, Ruger & Company is particularly mindful of those elements which have contributed to the creation of its success, and extends heartfelt thanks to its many loyal employees and customers.

A CHRONOLOGICAL OUTLINE OF PRODUCT DEVELOPMENT STURM, RUGER & CO., INC.

1949: The Standard Automatic Pistol, .22 long rifle caliber. The first model offered by Sturm, Ruger & Company is still in production.

1951: The Mark I Automatic Pistol, .22 long rifle caliber, with adjustable sights and various barrel lengths. The **Mark I Automatic Pistol** proved to be a match winner and was officially adopted by the Departments of the Army and the Air Force as a training arm.

1953: The Single-Six Revolver, .22 long rifle caliber. Styled after the famous "Peacemaker" the **Single-Six** revolver remained in continuous production until 1973. A light weight model and factory engraved model were introduced in 1956, and a **Single-Six Magnum 22** model chambered for the .22WRM cartridge was introduced in 1959. A **Super Single-Six** revolver with adjustable sights was added to the line in 1964.

1955: The Blackhawk Revolver, .357 Magnum caliber. In 1956 a .44 Magnum caliber version of the **Blackhawk** revolver was introduced. In 1965 a .41 Magnum caliber version was offered, followed by a .30 carbine caliber model in 1967. In 1971 a **Blackhawk** revolver in .45 Colt caliber with a convertible .45 ACP caliber cylinder was added to the line.

1958: The Bearcat Revolver, .22 long rifle caliber. This small, lightweight single-action revolver was reminiscent of Civil War era revolvers. In 1971 a **Super Bearcat** model with a steel frame was introduced. Both **Bearcat** models were discontinued in 1973.

1959: The 44 Carbine, .44 Magnum caliber. Ruger's first rifle, this semi-automatic carbine met with wide acceptance as the ideal brush country deer rifle.

1963: The Super Blackhawk Revolver, .44 Magnum caliber. A redesigned adjustable sight version of the earlier .44 Magnum **Blackhawk** model, the **Super Blackhawk** revolver proved to be a favorite of handgun hunters and sportsmen.

1963: The Hawkeye Pistol, .256 Winchester caliber. This unusual single-shot pistol on a heavy single-action revolver frame featured a heavy rotating breechblock. Discontinued.

1964: The Model 10/22 Rifle, .22 long rifle caliber. This semi-automatic rifle incorporated a unique 10-shot rotary magazine and has become one of the most popular firearms of its type in the world.

1967: The Number One Single-Shot Rifle. Produced in a variety of calibers from .22-250 to .458 Magnum, the **Number One Rifle** is used today by big-game hunters in all parts of the world. In 1972, an Americanized version of this single-shot design was introduced as the **Number 3 Carbine**.

1968: The M-77 Bolt-Action Rifle. Introduced in a variety of configurations and calibers from .22-250 to .458 Magnum, the **M-77 Rifle** has achieved unusual standing and great popularity among sportsmen.

1971: The Security-Six, Police Service-Six and Speed Six Double-Action Revolvers, .38 Special and .357 Magnum calibers. The new double-action revolver design marked Ruger's entry into the law-enforcement field and has met with ever increasing demand among sportsmen and law-enforcement agencies. In 1975, stainless steel versions of all double-action models were offered.

1972: The Old Army Revolver, .44 caliber. Ruger's first offering for the black powder shooter. The **Old Army** revolver, like the **Single-Six** model, was redolent of the guns of the western frontier days. A stainless steel version of the **Old Army Revolver** was offered in 1975.

1973: The New Model Single-Six, New Model Blackhawk and New Model Super Blackhawk were introduced incorporating an entirely new, patented "transfer-bar" ignition system. All older model Ruger single-action revolvers were discontinued at this time. In 1974, stainless steel models of the **New Model Single-Six** and **New Model Blackhawk** revolvers were introduced.

1975: The Mini-14 Rifle, .223 caliber. The company released to the general market this model which had already enjoyed considerable success in Government and law-enforcement markets. A police model (Mini-14/20GB) and selective fire rifles (AC-556 and AC-556K) have been adopted by many foreign military establishments and police forces in a variety of configurations. In 1978, stainless steel versions of the various **Mini-14** models were announced.

1977: The Over and Under Shotgun, 20 gauge. Although shotgun manufacturing represented a new area for Sturm, Ruger & Company, the new **Over and Under** shotgun demonstrated their expertise and originality in small arms design and manufacture.

1979: The Redhawk, Double Action Revolver, 44 Magnum caliber. An entirely new firearm embodying the most significant advances in the development of heavy frame, double action revolvers in many decades. Two notable features are: A crane and cylinder assembly which locks directly into the frame both at the rear of the cylinder and at the front of the crane, and low maximum weight double-action trigger pull. Produced initially in stainless steel only.

A catalog that fully describes and illustrates all of the above models (except those discontinued) is available free, upon request to Sturm, Ruger & Co., Inc., Southport, CT 06490.



SALE PRICE
\$ 3 00

STURM, RUGER & Company, Inc.
Southport, Connecticut 06490
U.S.A.

ALL RUGER FIREARMS ARE DESIGNED AND MANUFACTURED
IN RUGER FACTORIES IN THE UNITED STATES OF AMERICA